

**PROCESS FOR SEPARATING CARBON DIOXIDE FROM AN  
OXYGENATE-TO-OLEFIN EFFLUENT STREAM**

**ABSTRACT**

The present invention is a process for removal of carbon dioxide from a reactor effluent stream comprising water, carbon dioxide and olefin(s), where a portion of the carbon dioxide is removed in a quenching step with a quench medium and more carbon dioxide is removed by contacting the quenched effluent stream with an alkaline stream. A portion of the alkaline stream is added to the quench medium.